

033104  
1321 U.S.P.T.O.

PTO/SB/05 (01-04)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

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# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. 1875.3750001/RES/GSB

First Inventor Minsheng WANG

Title Hardware-Efficient Implementation Of Dynamic Element Matching In Sigma-Delta Dacs

Express Mail Label No.

USPTO  
12975033104  
10/10/04**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

**ADDRESS TO:**Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-145022553  
10/10/04

1.  Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2.  Applicant claims small entity status.  
See 37 CFR 1.27.
3.  Specification [Total Pages 24]  
(preferred arrangement set forth below)
  - Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4.  Drawing(s) (35 U.S.C. 113) [Total Sheets 11]
5. Oath or Declaration [Total Sheets 2]
  - a.  Newly executed (original or copy)
  - b.  Copy from a prior application (37 CFR 1.63(d))  
(for continuation/divisional with Box 18 completed)
    - i.  **DELETION OF INVENTOR(S)**  
Signed statement attached deleting Inventor(s)  
name in the prior application, see 37 CFR  
1.63(d)(2) and 1.33(b).
6.  Application Data Sheet. See 37 CFR 1.76

7.  CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission  
(if applicable, all necessary)
  - a.  Computer Readable Form (CRF)
  - b. Specification Sequence Listing on:
    - i.  CD-ROM or CD-R (2 copies); or
    - ii.  Paper
  - c.  Statements verifying identity of above copies

**ACCOMPANYING APPLICATION PARTS**

9.  Assignment Papers (cover sheet & document(s))
10.  37 CFR 3.73(b) Statement  Power of Attorney  
(when there is an assignee)
11.  English Translation Document (if applicable)
12.  Information Disclosure Statement (IDS)/PTO-1449  Copies of IDS Citations
13.  Preliminary Amendment
14.  Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15.  Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16.  Nonpublication Request under 35 U.S.C. 122  
(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17.  Other: Authorization under 37 CFR 1.136(a)(3)  
The name of the \_\_\_\_\_ is Broadcom Corporation

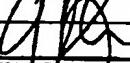
18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

 Continuation       Divisional       Continuation-in-part (CIP)      of prior application No.: 10/354,159
 Prior application information: Examiner Khai M. Nguyen  
 Art Unit: 2819

For CONTINUATION OF DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**19. CORRESPONDENCE ADDRESS**
 Customer Number: 26111      OR       Correspondence address below

Name	Sterne Kessler Goldstein & Fox, PLLC				
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Name (Print/Type)	George S. Bardmesser	Registration No. (Attorney/Agent)	44,020
Signature			Date 3/31/04

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

*If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

13281



U.S.P.T.O.

# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 1,032.00)

PTO/SB/17 (10-03)  
Approved for use through 07/31/2008. OMB 0651-0032  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE  
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## Complete if Known

Application Number	To Be Assigned
Filing Date	Herewith (March 31, 2004)
First Named Inventor	Minsheng Wang
Examiner Name	To Be Assigned
Art Unit	To Be Assigned
Attorney Docket No.	1875.3750001/RES/GSB

## METHOD OF PAYMENT (check all that apply)

- Check  Credit card  Money Order  Other\*\*  None
- \*Charge any deficiencies or credit any overpayments in Deposit Account: *The fees to Deposit Acct. No. 19-0036*

Deposit Account Number **19-0036**

Deposit Account Name **Sterne Kessler, Goldstein & Fox P.L.L.C.**

- The Director is authorized to: (check all that apply)
- Charge fee(s) indicated below  Credit any overpayments
- Charge any additional fee(s) or any underpayment of fee(s)
- Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

## 1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	<b>770.00</b>
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
<b>SUBTOTAL (1) (\$)</b>		<b>770.00</b>	

## 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Independent Claims	Multiple Dependent	Extra Claims	Fee from below	Fee Paid
25	- 20 **= 5		X 18.00	= 90.00	
5	- 3 **= 2		X 86.00	= 172.00	
				0	0

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 290	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent
<b>SUBTOTAL (2) (\$)</b>		<b>262.00</b>

\*\*or number previously paid, if greater; For Reissues, see above

## 3. ADDITIONAL FEES

Large Entity / Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1808 180	1808 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify) \_\_\_\_\_

\*Reduced by Basic Filing Fee Paid

**SUBTOTAL (3) (\$)** **0**

(Complete if applicable)

Name (Print/Type)	George S. Bardmessier	Registration No. (Attorney/Agent)	44,020	Telephone	(202) 371-2600
Signature					
Date	3/31/04				

**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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March 31, 2004

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Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

*Mail Stop Patent Application*

Re: U.S. Non-Provisional Patent Application under 37 C.F.R. § 1.53(b)  
Appl. No.: To Be Assigned; Filed: Herewith (March 31, 2004)  
(Cont. of Appl. No. 10/354,159; Filed: January 30, 2003)  
For: **Hardware-Efficient Implementation of Dynamic Element Matching in Sigma-Delta DAC's**  
Inventors: **WANG et al.**  
Our Ref: **1875.3750001/RES/GSB**

Sir:

The following documents are forwarded herewith for appropriate action by the U.S. Patent and Trademark Office:

1. PTO Utility Patent Application Transmittal (Form PTO/SB/05);
2. Authorization to Treat a Reply As Incorporating An Extension of Time Under 37 C.F.R. § 1.136(a)(3);
3. PTO Fee Transmittal (Form PTO/SB/17);
4. U.S. Utility Patent Application entitled:

**Hardware-Efficient Implementation of Dynamic Element Matching in Sigma-Delta DAC's**

and naming as inventors:

Minsheng WANG and Anil TAMMINEEDI

the application consisting of:

- a. An Application Data Sheet (37 C.F.R. § 1.76);

Commissioner for Patents  
March 31, 2004  
Page 2

- b. A specification containing:
    - i. 16 pages of description prior to the claims;
    - ii. 7 pages of claims (25 claims);
    - iii. a one (1) page abstract;
  - c. 11 sheets of drawings (Figures 1-3, 4A-4B, 5-7, 8A-8C and 9-10); and
  - d. A copy of the executed Declaration, as originally filed in U.S. Appl. No. 10/354,159;
5. Information Disclosure Statement;
  6. Form PTO-1449 listing twenty-five (25) cited documents;
  7. Form PTO-2038 Credit Card Payment Form; and
  8. Two (2) return postcards.

It is respectfully requested that, of the two attached postcards, one be stamped with the filing date of these documents and returned to our courier, and the other, prepaid postcard, be stamped with the filing date and unofficial application number and returned as soon as possible.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



George S. Bardmesser  
Attorney for Applicants  
Registration No. 44,020

RES/GSB:as  
Enclosures

246316.1